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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,635	10/28/2003	Andreas Simon Schmitt	13913-159001 / 2003P00566	6420
32864	7590	10/23/2006	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			INGBERG, TODD D	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/695,635	Applicant(s) SCHMITT ET AL.	
	Examiner Todd Ingberg	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/28/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 – 33 have been examined.

Information Disclosure Statement

1. The Information Disclosure Statement filed July 21, 2006 has been considered.

References AA and AB are in German and has been considered to the extent the Examiner understands German.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is optimization which is not a tangible result because the optimized results are not clearly claimed to be tangibly embodied on a computer readable medium. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 – 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Mariani et al USPN#5,854,932 issued December 29, 1998..

Claim 1

Mariani anticipates a method comprising: providing a system including an interface (Col 1, lines 39 – 46) and multiple units of compiled code (Col 1, lines 39-52), the interface including global components (Col 13, scope, lines 25 – 45) and each unit depending on at least one of the global components included in the interface (combination if limitations above); dividing the interface into levels ((col 13, levels of dependency shape, lines 25 – 35), each level including a set of one or more of the global components (Highest level must exist – at least one level); generating multiple dependency lists (Col 15, lines 22-33, levels based on program structure of source – e.g. class structure); associating a unique one of the multiple dependency lists with each of the levels (wizard, col 15, lines 18 – 24); associating a unit with a dependency list based on the global components on which the unit depends (col 15, lines 33 – 43); and marking only those units associated with a particular dependency list for recompilation based on a change to a particular global component affecting those dependency lists with relationships to a level that includes the changed global component (col 15, lines 42 – 53).

Claim 2

The method of claim 1 wherein the interface includes a definition unit (col 16, lines 30-34 – dependency information).

Claim 3

The method of claim 2 further comprising recompiling the unit automatically based on the marking (col 15, lines 18-34).

Claim 4

The method of claim 3 wherein recompiling the unit occurs at a subsequent usage. (col 15, lines 24 – 27).

Claim 5

The method of claim 4 wherein the subsequent usage is a next usage. As per claim 4.

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Claim 6

The method of claim 1 wherein marking only those units associated with a particular dependency list for recompilation based on a change to a particular global component affecting those dependency lists with relationships to a level that includes the changed global component further comprises: determining if a particular property associated with the level has changed; and marking the unit for recompilation only if a particular property has changed (Col 16, lines 22 – 43).

Claim 7

The method of claim 1 wherein dividing the interface into levels further comprises assigning an arbitrary number of levels to the interface. (Figure 6A, arbitrary number related to arbitrary levels of dependency which is stored in Project database)

Claim 8

The method of claim 1 wherein dividing the interface into levels includes assigning a level based on a dependency on all levels of the interface. (Col 9, lines 36 – 37 – Project database).

Claim 9

The method of claim 8 further comprising recompiling a client assigned to the level based on a strong dependency on the whole interface after each change to the interface. (Col 16, lines 22 – 43).

Claim 10

The method of claim 1 wherein dividing the interface into levels further comprises assigning a level based on a dependency on an interface component. (Col 16, lines 22 – 43).

Claim 11

The method of claim 10 further comprising, recompiling a unit assigned to the level based on a dependency on an interface component after each change to the component. (Col 10, lines 46-59).

Claim 12

The method of claim 11 wherein the change to the component includes a name change. (Col 9, lines 39 – 57).

Claim 13

The method of claim 11 wherein the change to the component includes a deletion of a component. (Col 9 lines 65 to col 10, line 8).

Claim 14

The method of claim 11 wherein the change to the component includes a layout change. (Col 9 lines 65 to col 10, line 8).

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Claim 15

The method of claim 1 wherein dividing the interface into levels includes assigning a level based on a reference to the interface. (As per claim 1).

Claim 16

The method of claim 15 wherein the client depends on the existence of the interface. (As per claim 1).

Claim 17

The method of claim 1 further comprising associating indirect clients with a level. (met by inherent top (first) level).

Claim 18

The method of claim 17 wherein the indirect clients are associated with a lower level than the units. (inherent relationship of calls as per claim 1 – part of interface).

Claim 19

The method of claim 1 wherein the dependency list is automatically managed by the system. (Col 9, lines 35 - 37).

Claim 20

A computer program product, tangibly embodied in an information carrier, for executing instructions on a processor, the computer program product being operable to cause a machine to:

- provide a system including an interface and multiple units of compiled code, the interface including global components and each unit depending on at least one of the global components included in the interface;

- divide the interface into levels, each level including a set of one or more of the global components;

- generate multiple dependency lists;

- associate a unique one of the multiple dependency lists with each of the levels;

- associate a unit with a dependency list based on the global components on which the unit depends; and

- mark only those units associated with a particular dependency list for recompilation based on a change to a particular global component affecting those dependency lists with relationships to a level that includes the changed global component. As per claim 1.

Claim 21

The computer program product of claim 20 further comprising, instructions to cause a machine to recompile the client automatically based on the marking. As per claim 3.

Claim 22

The computer program product of claim 20 wherein the interface includes a definition unit. As per claim 2.

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Claim 23

A computer product or article of manufacture configured to: provide a system including an interface and multiple units of compiled code, the interface including global components and each unit depending on at least one of the global components included in the interface;

divide the interface into levels, each level including a set of one or more of the global components; generate multiple dependency lists; associate a unique one of the multiple dependency lists with each of the levels; associate a unit with a dependency list based on the global components on which the unit depends; and mark only those units associated with a particular dependency list for recompilation based on a change to a particular global component affecting those dependency lists with relationships to a level that includes the changed global component. As per claim 1.

Claim 24

The computer product or article of manufacture of claim 23 further configured to recompile the unit automatically based on the marking. As per claim 3.

Claim 25

The computer product or article of manufacture of claim 23 wherein the interface includes a definition unit. As per claim 2.

Claim 26

The computer product or article of manufacture of claim 23 further configured to: determine if a property associated with the level has changed, and mark the unit for recompilation only if a property has changed. As per claim 6.

Claim 27

A system comprising: an interface and multiple units of compiled code, the interface including global components and each unit depending on at least one of the global components included in the interface; a means for dividing the interface into levels, each level including a set of one or more of the global components; a means for generating multiple dependency lists; a means for associating a unique one of the multiple dependency lists with each of the levels; a means for associating a unit with a dependency list based on the global components on which the unit depends; and a means for marking only those units associated with a particular dependency list for recompilation based on a change to a particular global component affecting those dependency lists with relationships to a level that includes the changed global component. As per claim 1.

Claim 28

The system of claim 27 further comprising a means for recompiling the unit automatically based on the marking. As per claim 3.

Claim 29

The system of claim 27 wherein the interface includes a definition unit. As per claim 2.

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Claim 30

The system of claim 27 further comprising: a means for determining if a property associated with the level has changed, and marking the unit for recompilation only if a property has changed.

As per claim 6.

Claim 31

A method comprising the steps of

- a step of providing a system including an interface and multiple units of compiled code, the interface including global components and each unit depending on at least one of the global components included in the interface;

- a step of dividing the interface into levels, each level including a set of one or more of the global components;

- a step of generating multiple dependency lists;

- a step of associating a unique one of the multiple dependency lists with each of the levels;

- a step of associating a unit with a dependency list based on the global components on which the unit depends; and

- a step of marking only those units associated with a particular dependency list for recompilation based on a change to a particular global component affecting those dependency lists with relationships to a level that includes the changed global component.

As per claim 1.

Claim 32

The system of claim 31 further comprising a step of recompiling the unit automatically based on the marking. As per claim 3.

Claim 33

The system of claim 31 further comprising a step of determining if a property associated with the level has changed, and a step of marking the unit for recompilation only if a property has changed. As per claim 6.

Examiner's Comments

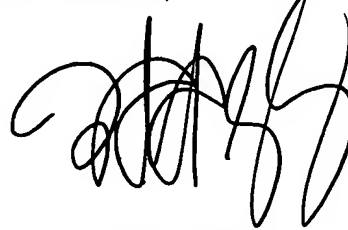
5. The claimed invention does not distinguish over the compilation being within a debugger. And the "subsequent usage" is not clearly claimed. The Crelier reference teaches a trigger based on time stamp.

Correspondence Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Todd Ingberg
Primary Examiner
Art Unit 2193